FROM WESTERN VIRGINIA.

Correspondence of The N. Y. Tribune.

ST. CLARA'S, Doddridge Co., Va., April 3, 1859.

The recent letters on the subject of Western Virginia, published in THE TRIBUNE, having elicited numerous inquiries about this section of country, I presume that further particulars, not sufficiently dwelt upon by your former correspondents, would be acceptable to many of your readers who contemplate improving their circumstances by emigration.

From many applications, received by myself and others, for descriptions of our soil, climate, and other elements of prosperity, I suppose that North-Western Virginia is but imperfectly known by that class of Northern stock-farmers who have the greatest interest in knowing all about it. Much of what I am going to say is, of course, applicable to several other sections or counties; but the region I have more immediately in view lies chiefly within a circle of about 30 miles in diameter, of which West Union, the seat of Doddridge County, is the center.

By referring to a modern map of the State, it will be seen that West Union is situated immediately on the North-Western Virginia Railroad, nearly midway between Parkersburg and Grafton, where it unites with the Baltimore and Ohio Railroad. By means of these roads and their connections the place is brought to within two hours from the Ohio River, and 18 from Baltimore and Cincinnati. The North-Western Turnpike, a first-class macadamized road leading from Parkersburg to Winchester, also passes through the town, which is at the same time the terminus of two other turnpikes, and of several county roads. Seven miles south of West Union the county is traversed in its whole breadth by the Harrisville and Salem Turnpike, nearly completed, and all these highways are intersected at numerous points by wagonable cross-roads, the length and breadth of which are rapidly increasing from year to year.

Doddridge County is well watered in every part by several more or less direct tributaries of the Ohio River, and well supplied with grist and saw mills, a few of which are driven by steam. Middle Island Creek, which is bridged at West Union, feeds several of the best mills in the county, and, at the proper seasons, affords water sufficient to float large rafts of lumber and flatboats down to the Ohio River markets.

Although quite centrally situated in the county, and astride of so many important thoroughfares, West Union is as yet but an inconsiderable place, and alike destitute of the population, capital and enterprise adequate to the development of the many business advantages of its favorable situation. This state of things, however, is mainly attributable to a great lack of the same conditions of prosperity in the surrounding country. It is *there* we first must bring about a change in the way of doing business, and I hope I am doing no injustice to my free-hearted and easy-minded indigenous neighbors, by venturing the opinion that this result cannot be attained for a century or so without a strong reënforcement of exotic industry, economy and intelligence.

CLIMATE.

As it is generally known and conceded that ours is one of the most healthy regions of the United States, I shall not expatiate upon the clearness of our mountain brooks and the bracing purity of our atmosphere. But the temperature of the seasons, on account of its relation to the crops, deserves a more particular illustration. The following extracts from meteorological tables kept here during a residence of 13 years exhibit the extremes of heat and cold experienced during that space of time:

From 1846 to 1851 the mercury never was above 90° nor below 18°.
1852, January, 2° below zero. July, 94°.
1856, January, 8° above zero. July, 94°.
1856, January, 8° below zero. July, 96° (severest Winter remembered).
1857, January, 0°. July, 98°.
1859, January, 12° above zero.

The mean temperature of last January was 33½°. Observations taken at 6 o'clock a. m. in the Winter, and at noon, or about 12 o'clock p. m. in the Summer.

The mean monthly temperature of 1856, beginning with January, was: 18½, 25½, 35, 64½, 68½, 80, 84, 70, 59¼, 49, 38.

The greatest heat, as well as the greatest cold in any one year, never lasted more than two or three days. These extremes once passed, the mercury seldom reaches up to 90° or descends so low as zero again.

For two or three years past the Spring season has not been so regular as desirable for the orchard, vineyard and garden—night-frosts, destructive to the peach crop and partially to the grape, having occurred so late as the end of April. The other fruits cultivated here are not so easily affected, and a total failure of the apple crop is not remembered. Gardening generally commences here about the middle of March; fruit-trees bloom in April, and the woods are out in full verdure about the beginning of May. Oats are sown and potatoes planted in March and April. Corn and Chinese sugar-cane are planted from the 1st to the last of May, and harvested in September. Clover blooms early in June; Timothy ripens about the 1st of July; rye, oats and wheat about the middle of the same month. Turnips and buckwheat are then sown, and wheat put in so late as the 1st of October attains sufficient growth before Winter to protect its roots from freezing out. About the middle of October, the pastures begin to fail and the woods shed their foliage; but the stock cattle, having sufficient range in the forest, sustain themselves in good order until Nov. 15, when they are driven to their Winter quarters, not to be turned out again until after April 15. Except for milk cows and calves, who have open sheds to run to, there is seldom any shelter provided for cattle, although they would winter much cheaper with it than without. Sheep run in pastures, or partly cleared wood lots, during the whole Winter, and seldom resort to shelter even when it is accessible to them. They hardly ever touch hay or fodder, unless the snow is so deep that they cannot pass through it. And even at this stage I have seen small flocks get along without dry feed, when they had plenty of sassafras and other favorite brush to browze on.

SURFACE AND SOIL.

A majority of the accounts of Western Virginia which have come under my notice describe it as a "generally mountainous or broken country," thereby giving the distant reader a rather inaccurate idea of our scenery and soil. Much the greater portion of it is neither broken nor mountainous, but simply hilly. The geological strata of this region, though perhaps gradually upheaved ages ago, have evidently never been disturbed in their primitive, horizontal position. The remarkable uniformity in the hight and shape of our hills, and of the breadth and sinuosities of most of our valleys, appears to be the result of slow and gradual abrasion, which is still going on, although its effects in a lifetime are barely perceptible.

The bottoms of our valleys are small, averaging probably not over eight or ten per cent; but their soil is generally composed of a rich, mellow alluvial, of most enduring fertility. The hills, from 200 to 300 feet high, rise in slopes of from 10 to 40 degrees, presenting one or two tolerably flat and arable benches between their base and summit. The tops of the ridges also frequently afford extensive flats of excellent wheat land. The eastern and northern hillsides, which are often cultivated in corn from top to bottom, contain some of the richest soil in the country, while the opposite sides, being more steep and stony, are seldom used for anything but pastures.

In its virgin state, the soil is densely covered with timber of truly magnificent growth, and of the most valuable kinds, principally poplar, hickory, beech, walnut, ash, sugar maple, white oak, red and black oak, chestnut and chestnut oak, buckeye, sycamore, linden, wild cherry, cucumber-magnolia, gum, elm, dogwood, &c. Evergreens are very rare, and represented only by an occasional spruce pine or two along some steep and rock bank, or a small cluster of yellow pine on a sterile and weather-beaten knob.

Lime is found in many portions of the country, and coal almost everywhere, though principally in small veins, and not of the best quality for manufacturing purposes. There are traces of iron and other minerals, the extent and quality of which have never been scientifically investigated.

PRICE OF LAND, LABOR, ETC.

There is very little land for sale that is worth buying immediately along the N. W. Railroad and Turnpike, in this county. The improvements there are generally very old, and much impoverished and neglected. Nor are there any large tracts of wild land for sale about here suitable for the establishment of a considerable colony. But many small lots and farms scattered all over the country could be had now at from $4 to $6 per acre, with improvements sufficient to dispense a new comer with the most formidable hardships of a beginning in the woods, and to enable him to raise his own bread and meat the first year. Very few of the purer class of our native settlers are able to pay for their land when they first locate upon it, and many of them are eager to sell out so soon as the value of their improvement is sufficient to pay up the purchase money and leave them enough to make a strong payment on a new piece of land somewhere else. Not unfrequently there are several such little farms for sale in the same valley, either adjoining each other or separated by a lot or strip of wild land, which can also be bought from the original owner, thus affording to the purchaser the facility of a farm of almost any shape and size he may desire.

Since the advent of our railroad, and the consequent influx of population from abroad, labor has been in great demand here. Steady and industrious farm hands command very remunerating wages, say $10 to $12 per month, during the farming season, with board.

To get land cleared smooth, everything cut down, rotted and burned up, and the underbrush grubbed, costs from $10 to $13 per acre, according to the size and density of the timber. When trees above one foot in diameter are left standing, and only girdled as *deadened*, the balance being cleared smooth, the price is generally about $6 per acre. Good Virginia rail fence made and laid up at from $1 to $1 25 per hundred. These are the prices, by the job, as it is called here, without board.

Objections to the *peculiar institution* of our State would be entirely gratuitous so far as most of the North-Western counties are concerned. A glance at the last census will satisfy every one as to the State of things in that regard. Whatever hard work is done here is performed by free white hands. This is emphatically a country of free labor, and although hard work is not a prominent virtue among the native yeomenry, yet it commands their respect much more than genteel idleness. That misguided class of homespun farmers who think it more respectable to make storekeepers, lawyers and fifth-rate politicians of their sons than to train them to their own calling, is unfortunately on the increase here, as well as in other parts of the Union; but when the members of these *liberal professions* will have grown too numerous, the evil will probably work its own cure. Its return, however, can only be prevented by diffusing among our country people that kind of knowledge and intelligence which will tend to elevate the standard of agricultural and pastoral life to its proper level.

In the meantime, all the opportunities left unimproved by the greater part of our present population, are open to enlightened industry and business talent from abroad; and if anything in the backward appearance of our section of country should at first sight cast a damper upon the spirits of the immigrant, he must bear in mind that if Western Virginia does not get along any faster for the present, it is not because she is *run down* like the Eastern part of the Old Dominion, but simply because she has never been wound up.

IMPORTANT TO FARMERS.

BUTTER AND CHEESE.

STABILITY AND GENERAL SUCCESS OF THE BUSINESS—PRESENT AND PROSPECTIVE MARKETS—CHARACTERISTIC QUALITIES AND STYES OF DIFFERENT SECTIONS—IMPROVEMENTS PRACTICABLE—PREMIUMS SUGGESTED.

Dairying has for many years been the most reliable and steadily profitable of any of the heavy food producing branches of Northern agriculture. Among the causes that have operated to give a remunerative prominence to this important interest are—the comparatively limited area well adapted to dairying thus far occupied; the relatively large capital required for stocking dairy farms, and the good judgment, skill, and persistent care requisite for the production of prime qualities, to which may be added the immense California demand for Butter, and the English demand for Cheese.

It is believed that the California demand must continue large, because the climate of that State is not favorable to the production of good keeping Butter, and the short period of fresh pasturage limits the home supply to a brief period.

The gold region of Pike's Peak may soon develop another new and important market for this staple.

There is no reason to expect a diminished export demand for Cheese, while, in the event of a European war, the demand from that part of the world will be largely increased.

In no article of food where so little opportunity for adulteration exists, is there so wide a range of quality and market value as in Butter and Cheese.

The local characteristics of Butter are so distinctly marked that experienced dealers can, upon examination, determine with a good degree of accuracy the section of country from which it comes.

ORANGE COUNTY BUTTER.

The Milk and Butter of Orange County, New-York, have long been famous; the former having come to be the type and synonym of purity and excellence in the lacteous food of this metropolis, while the latter always stands at the head of current quotations. The natural and local advantages of this county for Butter-making have been rendered so prominently available by the enterprise and skill of her people that the fame of her leading product will long outlive its relative excellence, and, for a time, sustain extra prices over equally meritorious rivals. Orange County Butter is usually packed in oaken pails, holding from 20 to 50 pounds, and is sent promptly to market with all the rosy freshness characteristic of the sweetest feed, and the most skillful preparation. The commission merchant sells this Butter by the gross weight, and after passing into the hands of retailers, and thence to families and hotels, the pails, when finally emptied are returned through the same channels to the first seller, who refunds the same price per pound for the packages returned. This style of package involves a great amount of labor in adjusting amounts, caring for the return pails, and keeping them in sweet condition for each successive trip. We would not, however, encourage an imitation of the Orange County style of packing in pails to be returned for distant localities. The half-firkin tub, or the Welsh tub of similar capacity with the pails, will command equally good prices for the same qualities, and the trouble and cost of returning would be more than the saving in expense of packages.

Many other sections are now successfully vieing with Orange County in the supply of fine fresh-made butter. The market rate is in consequence more and more determined by the "tryer," and less by local repute. The successful artifice, therefore, of sending butter into Orange County to be christened, will not be of much avail hereafter. Nothing is easier than for a butter or cheese maker, who can produce a superior article, to establish in this market, by regular consignments to a capable and responsible commission-house, a reputation which will insure ready and satisfactory sales.

The increased facilities of rapid transit, especially by express at the present low rates, enables dairy-men in nearly every section of the State, and even from other States, to place their butter in this market at almost any time they choose; so that the advantage of relatively high rates is no longer confined to near-by localities, but may be realized for superior qualities from distant points.

OTHER GOOD BUTTER COUNTIES.

Delaware, Otsego, Chenango, Cortland and Tompkins Counties, New-York, are noted for their large production of fine butter, which is principally packed in firkins and reserved for Winter use or sold for shipping. Much of the finest butter comes from this portion of the State, and sells in the Winter nearly as high as the best fresh-made Orange County, being, in fact, far superior to the best possible Winter-made butter. Yellow, solid and rosy—crystal drops of brine stand upon the tryer, and the perfect grain snaps under the pressure of the knife. A firkin of such butter is a most fortunate, and we must add, a most rare acquisition to the Winter stock of provisions in a city family.

FAULTS IN BUTTER MAKING.

St. Lawrence, Jefferson, Lewis and Oswego Counties pack principally in Welsh tubs and supply the bulk of this style of butter. The average quality is below that of the counties before named, although some very fine butter is made in this section, especially in Lewis County. This is a large cheese-producing section of the State, but it is also well adapted to butter, and the want of excellence results more from lack of skill than lack of natural facilities. Using coarse domestic salt, which does not completely dissolve, and over salting, are common faults. The presence of butter-milk and greasiness from destroying the grain by overworking, are also common. Canada butter has these faults to a still greater extent, with the addition of rough and slovenly packages. Most of the Canada butter is not packed in the dairy, but delivered in small parcels to the merchant or dealer, who assorts and packs the different "makes" for market. With proper skill and attention, choice butter might be made in Canada.

WESTERN BUTTER.

Western butter is widely different from all of these. That from the Western Reserve of Ohio, is the best, and has been largely shipped to California. There are no regular butter dairies at the West, or at least the butter is not packed by the makers, but taken to the merchant or butter dealer, who assorts the qualities and colors, and packs those most nearly alike for market. On the Western Reserve, where a large business of this kind has been done for several years, and where the lands are better adapted to dairying than in most parts of the West, a degree of skill in making and packing has been attained which gives a butter of pretty uniform color. It is well packed, keeps well, and ranks in point of flavor about with the second and third grades of the Butter of this State. As a general rule, Western Butter is irregular in color and quality; has what is called a "wild" flavor; is packed in rough, irregular packages, and of course sells at low rates, usually not much above the price of good lard, and large quantities of it become so poor as to sell much below that price.

Lack of drainage, which renders the construction of good cellars difficult, if not impossible, and lack of spring water, are serious obstructions to Butter-making in the West.

The more northern and hilly States of Michigan, Wisconsin and Minnesota may be expected ultimately to attain success in this important branch of husbandry.

NEW-ENGLAND BUTTER.

New-England butter, or at least that portion of it which reaches this market, particularly from Vermont, is noted for its stickiness. It is commonly packed in Welsh tubs, made of fir-wood, and ranks much below the finest grades.

BUTTER-MAKING.

While local characteristics are thus prominently marked, the difference in quality resulting from different degrees of skill and care in the makers of the same section is no less striking, some dairies bringing, in the same state of the market, 2 to 8 cents per pound more than others from the same neighborhood.

Much has been said and written on the art of Butter making. We trust some good has resulted from these efforts, but still a very large proportion of the butter sent to market is of inferior quality, and sells at low prices, though more labor may have been bestowed upon it than upon the very best.

Nothing pleases commission merchants more than to receive a strictly fine dairy of butter—sweet, yellow, rosy to the smell, and delicious to the taste. It sells readily at a satisfactory price, and every body is pleased, from producer to consumer. Common and inferior butter *sticks*, notwithstanding its *greasiness*, at every stage, causing dissatisfaction and trouble from beginning to end. It is either colorless, milky, sticky, over-salted, under-salted, strong, rank, or rancid, or all these combined—at any rate, it is not what it should be.

Without pretending to a practical knowledge of butter-making, we herewith condense such of the principal conditions and requisites for making first-rate butter as we have been able to gather from various sources.

We will thank any first-rate butter-maker for additional hints or criticisms of what we have herein stated.

CONDITIONS REQUISITE.—*First:* Cows of good milking quality; some good butter-makers think selected natives the best.

Second: Food—One of the most experienced and best butter-makers in the State, recommends a mixture of grasses, such as red and white clover, timothy and blue grass. Keep the pastures free from rank and strongly flavored weeds. Pungent roots and vegetables, such as turnips and cabbage, will injuriously flavor the butter, and injure its keeping qualities. Pumpkins and carrots are the best vegetable food when the season of grass is over, and give a fine color to the butter; but ground feed, such as the bran of wheat, rye, and corn, or ground oats, is believed to be best in Winter, as it keeps the cows in thriving condition, without too much increasing their fat, and makes the best-keeping and best-flavored butter.

Third: Keep the cows quiet, particularly during the warm weather. The milk from cows when in the periodical fever, or when heated from any cause, will not make the best-flavored or best-keeping butter, and should be rejected from such use.

Fourth: Keep the atmosphere of the milk-room perfectly fresh and pure, and at as even a temperature as possible—it should not be warmer than 65 deg. Fah. As soon as the milk coagulates, or just before this change occurs, it is ready to be churned, or skimmed. Some of the best butter-makers churn the milk with the cream, others skim and churn only the cream. When skimmed, the cream may be kept in the cream-jar six to twelve hours, occasionally stirred, but never covered. Tin pans are commonly used for setting milk, but tin pails, holding twelve quarts, are preferred by some of the most skillful.

Fifth: The contents of the churn should be at the temperature of 64 deg., and the dash should be moved at the rate of about 50 strokes per minute; neither hot nor cold water should be turned into the churn to regulate the temperature. Setting the churn in hot or cold water is a better way; hot water turned into the churn injures the color and grain of the butter. Soft water is indispensable for washing butter to the best advantage. If you cannot get soft water otherwise save rain water, and cool it with ice. The water from ice is always soft. When thus washed it is ready for salting. When the conditions are right the butter will "come" in 20 to 30 minutes. When done, the butter should be taken from the churn and thrown into a smaller vessel, partly filled with water, at 42 to 44 deg. Fah., and the buttermilk forced out with a small dash or ladle; then put in trays and wash until the water used ceases to be the least discolored with buttermilk. The great point to be attained in washing or working butter is to expel *all* the buttermilk without overworking the butter, which spoils the grain, and renders it sticky or greasy. After the butter has stood in the trays about twenty-four hours, and been worked lightly three or four times, it is ready for packing. Some good butter-makers do not work so many times. It should never be worked in a dry state or without water, as that would injure the grain and damage the flavor at once. After the firkin or tub is filled the butter should be covered with a thin piece of muslin, and the whole covered with strong pure brine, which must not be allowed to evaporate or leak out.

Over-salting is one of the most common faults of butter-making. Not uncommonly coarse salt is used in such quantities, and with such treatment, that it remains undissolved, and will grate in the teeth. Such butter must be sold from 3 to 6 cents per pound lower on that account

BUTTER PACKAGES.

White-Oak Firkins, with smooth, round hickory hoops, holding about 100 lbs., are most largely used, and decidedly the best when the article is to be kept a long time—no other can be used for shipping. Half-firkin tubs, or the regular firkin sawed in two, with a flat cover nailed upon the top, is a favorite package for choice Butter. Welsh tubs, or tubs with straight staves, largest at top, with cover or lid shutting over and strapped down with pieces of leather or tin, are much used in some sections. They are very convenient for the domestic trade. They are commonly made of ash, which is next to white oak for this purpose. Maple, whitewood, and other soft woods, are unfit, as they soak largely and impart injurious flavors to the Butter. Butter may be advantageously kept under brine while at the dairy, but when finally closed up for market the pickle should be carefully turned off and a cloth wet in strong brine spread over the top. The top head of the firkin or the lid of the tub should never touch the Butter.

CHEESE.

Successful Cheese-making is confined to a still narrower area than Butter-making. The styles and qualities vary quite as much, the process of making is more complicated, and the losses from lack of skill and of sufficient care are very great. Herkimer County, N. Y., is most noted for fine Cheese. Jefferson County, N. Y., produces the greatest quantity, and many of her dairies are of the finest grade.

Goshen, Conn., is famous for her English dairy Cheese. Some portions of the West are developing this branch considerably—and some of the Western Cheese is of fair quality—though not exempt from the "wild" flavor.

INFORMATION ON CHEESE-MAKING WANTED.

We have never seen the details of cheese-making clearly written out, and although the best directions as to the method of making Butter and Cheese will not enable stupid and careless people to produce good articles, the naturally skillful an intelligent may profit largely thereby. We hope the mysteries of cheese-making may be developed for the benefit of both producer and consumer.

PREMIUMS RECOMMENDED.

Judiciously-awarded premiums for choice productions are no doubt efficient stimulants in the right direction, and we would suggest to the American Institute that liberal premiums for the best dairies—not single specimens—of butter and cheese, accompanied by delineations in detail of the character of the soil, breed and condition of the cows, kinds of feed, implements and conveniences, record of the weather throughout the season, with all the minor details of the process, would stimulate a dignified and worthy competition, and tend greatly to elevate the character of these important staples. The scheme should be put forward with liberality and care, the judges of quality should be from among the most intelligent and experienced dealers and factors; and under such auspices there could be no doubt of a spirited competition, with interesting and useful results.

New-York, April 20, 1859. DREW & FRENCH.

FACTS FOR FARMERS.

FARMERS' FAIRS.—Fairs, in the true meaning of the word—not cattle-shows—are becoming fashionable in this country.

"*Fair*—A stated meeting of buyers and sellers for trade."—[Webster.

Such fairs among farmers will be highly beneficial to both. We have noticed several in Connecticut, lately organized, and one at Springfield, Mass.; and now a correspondent sends us an account of one which held its first meeting at North Bloomfield, Ontario Co., N. Y., April 7. The following list of officers includes some of the best farmers of that and adjoining counties:

ALEXANDER MARTIN of Lima, President.
BENJAMIN BONER of Lima, Treasurer.
JOHN WOOD of North Bloomfield, Secretary.
Directors—John Idesan, Richard Peck, D. H. Albertson, Martin R. Pierce, of Lima, Livingston Co.; Curtis C. Yates, Alfred Yates, Jasper C. Peck, of West Bloomfield, Ontario Co.; Lewis Johnson, Lyman Waite, Mendon, Monroe Co.

Notwithstanding the unpropitious weather, the first fair was attended by a large number, and the result appears favorable to the farming interest. Fairs of this sort should be engrafted upon all of the so-called State and County Agricultural Fairs.

A NEW GARDEN IMPLEMENT FOR TRANSPLANTING.—We have before us, a new Yankee invention, for which a patent is applied for by John Burgum of Concord, N. H., which we think deserving of the notice of all who have occasion to transplant small garden plants or flowers, from one bed to another, or from the ground to pots. Imagine a tapering pint tin pot, with the bottom cut off, and the cup split up and down into two halves, and these halves attached to two handles, like those of a stout pair of shears. By opening the handles, so as to spread the halved cup a little apart, and thrusting it, small end down, into the ground upon each side of the plant, and then pressing the handles together, the dirt is pressed around the roots, and the plant may be lifted out and set in its new place directly from the implement; or any number of them may be laid upon a board or in a box for distant removal. The implement is strongly made, and cannot be expensive, certainly not over a dollar, and will be an acquisition to the already large list of garden tools.

THE AGRICULTURAL PRESS.—We earnestly commend to every reader of THE TRIBUNE, the following item copied from the *Journal of the California State Agricultural Society*. It is not the first time the same thing has been said, but it will bear repeating.

"Few persons appreciate the benefits of a well-conducted agricultural journal to the country whose resources it is designed to develop. The cant phrase, tinctured with a sneer, '*book farming*,' is still sufficiently prevalent to show that agricultural literature has not yet accomplished its work. Still it has done much, and its successes annually multiply.

"Forty years ago and the "*American Farmer*," published weekly at Baltimore, under the auspices of John S. Skinner, was in embryo, its maturity and real birth being on the 2d of April following. In August, 1822, Thos. G. Fessenden of Boston issued the first number of *The New England Farmer*, also a weekly; and not long afterward Mr. Samuel Fleet commenced *The New-York Farmer and Horticultural Review*. These were all the agricultural journals in existence thirty years ago. Even as late as within the last twenty-five years, all the agricultural journals on this continent had not an aggregate circulation of 10,000, while at the present hour the aggregate is more than a quarter of a million. And beside this, the time has come when our best family periodicals, from the half-penny daily to the ponderous quarterly, find it to their advantage to have an 'Agricultural Department' in their columns. For the influence of the Press, we refer to the improvements in every department of agriculture—the implements with which the work is done; the quality of the productions, and the profits of the enterprise. They are all as visible as the morning star. The time has come, and may it never depart when, other things being equal, he who does not read a good agricultural journal, cannot successfully compete with him who does."

THE OREGON FARMER.—This is the title of a newspaper "devoted to the soil culture of Oregon and Washington Territories." We notice in it an advertisement of "Lawton or New-Rochelle blackberries, at $25 per hundred."

This valuable fruit will soon be in cultivation in every section of the United States, and it is also being introduced into England.

The Oregon Farmer is a small but neatly-printed quarto of 16 pages, two of which are filled with advertisements, which shows that people there understand the advantage of making known what they have to sell. The advertisements are not all agricultural, unless the Oregonians make planting "tombstones" a branch of their agricultural operations. The following item, clipped from *The Farmer*, shows progress in a country destitute of bees when taken possession of by the Eastern immigrants:

"OREGON BEES-WAX.—At the late meeting of Bee-raisers, in Oregon City, we noticed a cake of very nice Bees-wax, made from comb produced in the apiary of Mr. T. T. Eyre, near Salem; also several specimens of comb, showing the different stages of the breeding of the Bee—the Worker, Drone and Queen cells. Mr. E. evinces a spirit of progress we would wish to see partaken of by every producer in Oregon."

Here is another evidence of progress. The Editor has not only got a new suit, but a home-grown, home-spun, home-made one, upon a Yankee sewing-machine.

"Through the kindness of Mr. Pratt, Superintendent of the Willamette Woolen Factory, we are now enjoying the comforts of an 'Oregon built' suit of clothes. The wool was grown upon Oregon sheep; manufactured into cloth by the Willamette Woolen Factory; partly sewed by one of our friend Pomeroy's 'Wheeler & Wilson's Family Sewing Machines,' and finished up by an Oregon tailor. This is perhaps the first full suit produced wholly on the Pacific coast. We are proud of the suit, and proud of the country that produced it."

FERTILITY—ITS SOURCE.—"A farmer's son" writes us upon this subject from Will County, Illinois. His communication is too long for publication, though he advances some ideas which it would be well for the fathers of farmers' sons to profit by. For instance, he asks: "As all fertility comes from oxydation of some mineral or vegetable substance, and as no new organism can arise except upon the destruction of some substance, and as oxydation is the great source of destroying power, does it not stand to reason that deep plowing, constant stirring and exposure of the water to the oxygen of the air must add to its fertility? And is not the great cause of increased fertility of underdrained land, that it is freed of its preserving water, and admitted to the effects of air, and oxydized, and thus made fertile?"

SWAMP MUCK.—Another farmer's boy writes from Waterville, Oneida County, N. Y., and inquires "if Swamp Muck, used fresh from the bed, is deleterious?"

Yes, until it has received just what the writer of the preceding letter has said the evil needs—air—and from the air oxygen. That will decompose the fibers of the muck, and sweeten the acidity spoken of.

It is not profitable to apply muck fresh from the bed, because it is sometimes injurious instead of adding fertility to the soil. It may be hauled out upon the field where it is to be used, and exposed to slow decay by the atmosphere, but it is better to decompose it with lime and salt; that is, lime slakened with water, saturated with salt; or by composting the muck with animal or vegetable substances until it becomes thoroughly pulverient before using it as a manure. Where it is convenient to carry muck to the farm yard and stables, it will always pay to do so, as it is an excellent absorbent of the gaseous matter that escapes from the solids, as well as of the liquid substances of the stable. Every cord of muck composted with stable manure makes two cords of the compound, worth more than one of the manure alone.

We lay it down as an incontrovertible fact, in all the Eastern States, that every farmer who has a muck bed can double the value of all his other manure by the use of muck, over and above the expense of digging and hauling any reasonable distance.

TURF ASHES.—We give brief answers to an inquirer's questions, as follows:

Q. What season of the year should the turf be cut? A. When driest.

Q. Can the cutting be done with a common plow? A. Yes.

Q. If so, how deep the furrow? A. Two inches.

Q. Should the turf be turned or moved in any way in order that they may more thoroughly dry? A. It may be cut and set up to facilitate drying.

Q. I have an old and exhausted farm, and wood ashes produce a good effect, but they are scarce, and command a high price. If we can burn common grass sod, I should like to? A. Well, you can, and profitably to your advantage. Start the fire with brush and weeds, and then add sods gradually until you get them agoing, and there is little trouble about reducing them to ashes.

DRAINING IN FRANCE.—The total amount of land drained in the Department of *Seine-et-Oise* is 5,000 acres; this has been done by 224 land-holders, and has cost an average of $27 an acre. The product of this land has been increased by $9 an acre. The yield of wheat has gone up from 19 to 26 bushels per acre, and of oats from 28 to 40.

SOFT SOAP.—One of the things that always bothers new beginners in housekeeping is the making of soap; yet it is as easy to make it as it is to use it. Put good ashes in a leach, with a few sticks, a little straw and lime in the bottom; moisten the ashes as put in, and let them stand so a day or two, or else saturate them with water and stand without, dripping, at least two days. If the first run is weak, pour it on again. Boil your lye until it is very strong. If salts form, take them out; they are not the salts of potash, or at least not in such a state as will make soap. To the pure, strong lye, add as much grease as it will take; you cannot get in too much. You need not fear to put bones, skins and lean meats, into good lye. You can skim out all that is not dissolved. Your lye needs but little boiling after the grease is added, for it will become soap at once. Make your soap a salve instead of a jelly, and never use it while new.

HUNGARIAN GRASS.—In answer to the inquiry of several writers, we say: The Hungarian grass is a good forage crop on the rich lands of the West. It will exhaust soil, and if it is not rich it will not produce a profitable crop. The time of sowing is that of oats. We would use a peck of seed per acre, and cut for hay before the seed is in the milk. It should be cured like timothy, and stock will eat it as well—many say better. The Hungarian grass is millet. Whether precisely the old German millet or not, which has been long cultivated in this country, is no matter. It is, at least for the prairie farmers, a good crop plant. The sellers of "honey blade grass seed" are knaves of the meanest sort.

WHAT IS A GOOD COW?—We think a cow that comes up to the standard of that owned by Otis Hunt of Eaton Village, N. Y., will pass for a good one. He gives the following statement of the amount of butter made from her: "Amount made from April 8 to July 8, 191 pounds; amount made during the month of June, 74 pounds; amount made during the year, 516 pounds; beside furnishing all the milk and cream used in a family of four persons (and occasional visitors) all the time."

The breed of this good cow is given as "native," and the quality of milk and butter excellent.

EGGS—HOW TO PACK THEM.—The following directions are given, by one who has had a good deal of egg packing to do, as the best method:

"Always use clean oats. First put them one inch deep in the bottom of the barrel; then a pretty firm sheet of paper; then a half inch of oats again, well pressed; then eggs, ends up, followed by oats and eggs as before, but working each layer of oats with the hand snugly down around the eggs next the barrel, as well as rubbing them effectually in between each of the eggs in the layer. I use a board some six or eight inches square, with a loop or staple in the center, for pressing each layer of oats firmly down. There will be something gained by lifting and dropping the barrel square on the end, but not by shaking, as it disturbs the layers. When it gets too heavy to lift, use a board three fourths as large as the head, and get on it, increasing your weight with a spring. End as you began, with paper and oats, getting on the head and driving it in. The secret lies all in packing the oats. Oats are better worth sending to market than hay, and just as safe. I have sent ten barrels at a time without losing a single egg. You must pack tight. Remember that."

PEACH TREES FOR FUEL.—Peach trees should be grown upon the prairies for fuel. No tree grows more rapidly, and no seed is more sure of germinating than the peach. The stones should be planted in the nursery, and the first Summer's growth cut off two or three buds above the ground before Autumn, or in time for the wound to heal and new shoots to start. The young trees may then be taken up and planted out ten feet apart in orchards. This mode of cutting back gives two to five trunks instead of one, which make more wood, and are less likely to be winter-killed. If the shoot is not cut back until the Spring after the seed grows, let the root remain another season in the nursery.

Another good way is to plant the stones in drills, ten feet apart, in the orchard—the ground to be well prepared, and the rows kept free from weeds by the plow. In the Fall, turn a good furrow from each side against the rows, and level them, if necessary, with a hoe, and then mow off the shoots even with the ridge. Draw out, for planting the next Summer in other places, the weakest of the plants, and let the others grow, heading back each year. In three years the trees will begin to bear, and those which do not promise good fruit may be used for fuel. Of course, the fruit is a secondary object, and all that is got is clear gain—as the trees are grown that fuel may be had at less cost and trouble than to haul it from a grove four or five miles distant.

PORK—HOW MUCH TO A BUSHEL OF CORN?—We continue to receive answers to this question. J. J. Carter, of Hornville Chester Co., Penn., says that B. P. Kirk kept a debt and credit account, with his pig. He fed 49 1-10 bushels of corn at 60 cts. a bushel, and added the first cost of the pig at two months old, $5—making a total of $34 46. At 17 months old the animal weighed 649 lbs., and sold for 7½c. a pound, making $48 67, giving a profit of $14 21. A little bran was fed, but that was reduced to the equivalent of corn and counted as above. The breed of hogs common in Chester County is one of the best in the world.

LETTERS FROM FARMERS.—Our letters from farmers have accumulated to a vast pile. We cannot print them. We hope to make them of service to our readers by the facts which, like the following, we gather from them. We ask for their continuance.

BEAN PORRIDGE.—A Yankee woman tells us how to make this good old-fashioned food.

Put a shank of beef (fresh is best) in a medium-sized pot of cold water, and boil slowly. Don't use pork. When the meat is boiled enough to form a good geletanious soup, add a pint of gray beans and nearly as much hulled corn. Boil thoroughly, and if the soup is not thick enough to suit, add a little meal, flour, rice, or crumbs of dry bread. A pepper-pod should be boiled with the soup; and add salt to suit the taste.

SWEET CORN dried by parboiling while in the roasting-ear, and then cut off and put on plates in a mild oven, is good for bean porridge or succotash.

WOODEN DRAIN TUBES.—S. P. G. of Racine, Wisconsin, says wooden tubes, with perforations through the sides, loosely jointed, will answer all purposes of tile, will last as long in places where they are constantly wet, and can be laid for half the expense.

TIMOTHY.—A writer from Buchanan County, Iowa, says that he prepared ground in September, harrowed and sowed six quarts of timothy seed per acre in March, and made twenty tuns of good hay from nine acres in July.

TURKEYS—SUCCESSFUL RAISING.—J. E. Alton of Quinsigamond, Mass., writes us that Mrs. M. Bennett of Auburn, Mass., had a three-fourths wild turkey, of very large size, which laid eleven eggs, all of which she hatched and raised. At six months old, the united weight of the eleven was 220 pounds. Some of the male birds weighed 34 pounds, and the lightest hens 17 pounds. One male sold for $7, and the whole for $55.

MUSKETO BITES may be cured by liquid ammonia (spirits of hartshorn) and water, equal parts.

WEEDS DESTROYED.—"I hired a little boy at a cent a dozen for dock roots, and it gave him encouraging employment and spending money, and rid me of a great pest." This is "what a woman can do" about farming.

PEAS FOR EARLY USE.—A writer says: "Plow and hoe out a furow eight inches deep, and sow peas and cover with fine manure and earth level. The seed will not rot nor be scratched up by hens, and will grow early and strong, and endure drouth. Do not plant peas twice in one spot. One or two fine wires stretched above the fence around a garden will keep out hens.

POTATOES UNDER STRAW.—Several writers speak encouragingly of the practice of growing potatoes under straw. Prepare the ground well and plant in drills and cultivate once after they grow, and then, while the surface is fresh, cover eight inches deep with straw.

THE DRAINING PLOW, described by Major Dickinson, is highly commended by a correspondent at Auburn. Another writer wants to know how long the round bar is? It may be two to four feet long. The two flat bars are welded to the round one and fastened to the beam by screw bolts.

GRAFTS IN WILD STOCKS.—Our Iowa friend is informed that to graft cultivated fruit on wild stocks, such as plain, thorn, crab, &c., is all labor lost.

THISTLES are often spread over a farm from chance seed on the highways. "No man," a correspondent says, "will permit a thistle to go to seed by the side of his farm, if worthy of the name of a man, or fit to be called a farmer."

DRYING PUMPKIN.—Marietta Strong of Kalamazoo, Mich., gives "a most excellent way to dry pumpkin:" After it is nicely stewed, put it in a tin pan, set it over a kettle of boiling water, and stir occasionally.

DRYING GREEN CORN.—The same process for drying sweet corn, after being boiled and cut from the cob.

PRESERVING MINCE-PIE MEAT.—She also says: When you have more material for minced pies than you wish to use immediately, prepare it *all* as for pies, but much more wet; put it in a clean brass or porcelain kettle, cook it an hour or two—no matter how long, if you stir occasionally, and not let it burn—then pack in a jar, cover it with melted butter, or molasses or sugar, and it will keep a long time. I keep it all Winter.

PORK-BATTER CAKES.—We will vouch for the excellence of the following cooking described by her: The best way I know to cook salt pork is to cut rather thin slices, beat the *white* of an egg, have some butter or fat *hot*, dip the slices in the egg, then into flour, fry till a good brown and lay on a plate *dry*. You can use the yolk for the gravy, but do not put it with the meat.

ITALIAN BROOM GRASS.—A correspondent commends very highly a new kind of grass known under the above title, and also as Italian, and Chinese, buckwheat, which appears to us from a sample sent in his letter much like, if not identical with canary bird seed. It is said to weigh 60 lbs. per bushel, and comes to perfection in two months.

CORN GRUB.—To prevent the black grub from eating corn, as soon as planted take strong ashes and plaster in equal parts and put a good handful on each hill.

LARGE HOGS.—Isaac Harrison of Burlington County, N. J., fatted in 1858 32 hogs that averaged 569 lb each; and Wm. Taylor of Ocean County fatted 30 that averaged 537 lb each. Thos. Hood of Ocean County fatted 41 that averaged 533 lb each. So says C. W. Hartshorn of Burlington County, who sends us a list of weights, among which are very few under 500 lb; the highest that we notice weighs 428 lb.

A PRAIRIE DRAINING-PLOW.—A machine is in use in Illinois that answers a good purpose in draining the ordinary soil. A strong beam, on four rollers, carries a small cutting wheel, which divides the sod; this is followed by a sharp coulter, set at an angle backward, to the bottom end of which a piece of iron, shaped something like a pear, is welded, supported by a flat bar, bolted, like the coulter, fast to the beam. To this "mole" is attached a second, of similar shape, a little larger, by a link joint. Being set into the ground, it opens a hole, which it molds permanently by side pressure, three feet below the surface, and through this drain the matter runs off as easily and continuously as through tile drains.

PREPARING FOR CORN.—A Michigan correspondent says that he produces great crops of grass by using plaster. For corn, he plows in clover sod in the Fall, and apply all my manure to it in the Spring, working it in thoroughly with the cultivator and harrow. Hoeing the corn fits the ground well for wheat, and I sow it as soon as the ripening of the corn will admit. After the wheat comes off, I plow in the stubble in the Fall, for oats, with timothy and clover in the Spring. In this way I get three crops of grain (one of them wheat) in three years, and get the land back to clover in the time. Last year my corn yielded 100 bushels of ears per acre, and the wheat this year, on the same ground, averaged 14 bushels per acre, though it was badly shrunk. These crops were raised on land which was thought nearly barren when it came into my possession.

WHEAT—CHANGING SEED.—An Ohio wheat grower thinks it would be to the advantage of farmers to change their seed as often as once in three years, but that seed from milder climates—as Italy, for instance—is not beneficial. He urges upon all to try experiments in the change of seed grain of all kinds, particularly wheat, and to obtain it from regions north of their own.

LIQUID MANURE.—"Please publish the best method of applying liquid manure, to what crops, and at what season of the year." A. Yes, Sir; we will. The best method of applying it is by a steam-engine, underground pipes, hydrant taps, and hose. There is not a doubt in our mind about the economy of sending all the manure of the farmstead to the field by steam power, upon every farm large enough to pay for its use. Solid manure is easily made liquid, and there is no doubt of the economy of preserving it in that state, and certainly there can be no doubt about using it in that condition.

The best crops to which to apply liquid manure are grass, clover and small grain, but it may be applied with advantage to all hard crops. The same order may be advantageously pursued in applying any sort of farm manure. That is, to grass first, and make the sod manure the grain crops. Small farmers, who cannot send their liquid manure a-field by steam, may have a large cask or tank on wheels, with a sprinkler attached. It is not much more expensive to cart liquid manure to near-by fields than it is to handle and cart it solid; as it is loaded by pumping; and it could be loaded by the weight of the cart on a sinking platform; and the cost of carrying the extra water perhaps would not be as much as shoveling and handling the manure. Instead of barn cellars, we should have manure tanks. And instead of a dozen men, and teams, and carts, and shovels, and forks, we should have a four-horse-power engine, with one man to attend it, and another to the horse, and it will certainly carry more manure to the field, any distance, than four horses, not only putting the manure where it is wanted, but also exactly where it is needed for the crops in dry, hot weather. The quantity of grass that has been produced by such liquid manure waterings is almost incredible to those who have only seen it grow in the ordinary way.

BALLS IN THE STOMACH.—W. F. Patterson of Russell Springs, Ky., writes to inquire about the phenomena of formation of balls in the stomach, and gives the following account of a case:

"I have one of five balls taken from the stomach of a hog about 15 months old, reared in the woods, and fatted last Fall and killed for bacon; no disease of any kind noticed. The ball I have, is just two inches in diameter, a most perfect sphere, very smooth; nearly of a mouse color, is of a strong smell, not unlike cheese, and seems to be made of fur. It is quite light, yet hard to the touch. One, taken to pieces, showed nothing but a small husk of a grain of corn in the center. Other people may be familiar with such things, but we don't understand this freak of nature. Witch balls, you know, are not uncommon with cows. They are made of hair, but this is a new kind. Cannot some of the spirit-rapping people solve this mystery? You know spirits went into the swine in old times."

GRAPE CULTURE IN CALIFORNIA.—A correspondent at San Francisco sends us the following:

"I condense from the statistics of the Mechanics' Institution, and the address of Mr. Banks of San Francisco, the following remarks: Almost every nook and corner of our entire State is admirably adapted to the growth of the grape. In France, a first-rate crop of grapes is 5,000 lb per acre, while 2,000 lb is regarded a fair crop. In the grape-growing districts along the Ohio river, where a superior grape is produced, 8,000 lb is considered a very large crop—4,000 to 5,000 lb is regarded as a good average; but in California, the ordinary crop is from 10,000 to 13,000 lb to the acre, and more is not unusual.

"In the old world, and in the Atlantic States, the grape crop frequently fails on account of frosts and disease; here it is sure to yield abundantly. *There* the vine must generally be supported by poles; *here* it stands without artificial aid. There a large amount of cultivation is costly; here it can be had for almost nothing. There the rains frequently interfere seriously with the ripening and gathering; here, during the vintage, we have an unclouded sky. The returns of last year show the grape crop to have been 51,000 tuns, and the wine product 300,000 gallons, beside a large quantity of brandy.

"Now, putting aside for a moment the consideration